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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,411	03/09/2004	Chih-Ming Chen	300.1005 CON	9033
7590 12/29/2005			EXAMINER	
DAVIDSON, DAVIDSON & KAPPEL, LLC			YOUNG, MICAH PAUL	
485 Seventh Avenue			ART UNIT	PAPER NUMBER
New York, NY 10018			1618	
			D. TT. 14.11 ED. 10.10.10.00	_

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/796,411	CHEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Micah-Paul Young	1618				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 16 Se	entember 2005					
· <u> </u>	<u> </u>					
closed in accordance with the practice under E	•					
·	reputte quayto, 1000 o.b. 11, 10	0 0.0.210.				
Disposition of Claims		•				
4) Claim(s) 1-23,25 and 28-30 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-23,25 and 28-30</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. 8 119(a)	-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents	have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau		3				
* See the attached detailed Office action for a list of		d.				
Attachment(s)						
) X Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413)				
Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal Pa	atent Application (PTO-152)				

Application/Control Number: 10/796,411 Page 2

Art Unit: 1618

DETAILED ACTION

Acknowledgment of Papers Received: Amendment/Response dated 9/16/05

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1-6, 9-20 and 28 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-21 of prior U.S. Patent No. 6,790,459. This is a double patenting rejection.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 21-23 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. The claims are drawn to a controlled release oral dosage form as described in Figures 1-3. However claims must stand alone and be fully described in and of themselves. Correction is required to overcome this rejection.

Application/Control Number: 10/796,411 Page 3

Art Unit: 1618

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 8. Claims 1-20,25 and 28-30 rejected under 35 U.S.C. 103(a) as being unpatentable over the combined disclosures of Whitcomb (USPN 6,011,049 hereafter '049) and Byrd et al (USPN 6,191,162 hereafter '162). The claims are drawn to controlled release formulation comprising metformin where the dosage forms comprises a core and membrane coating. The core and coating comprise common excipients well known in the art such as binders and plasticizers.
- 9. As discussed above the '049 patent discloses a metformin formulation comprising common excipients in tablet or capsule form, however the disclosure is silent to a specific core or coating structure. This is however well known in the art and would be obvious to one of ordinary skill. This can be seen in the '162 patent.
- 10. The '162 patent teaches a controlled release formulation capable of reducing serum glucose levels (abstract). The formulation comprises multiple pharmaceuticals including biguanides such as metformin (col. 8, lin. 23-61). The cores include excipients like binders and absorption enhancers such as polyvinylpyrrolidone and fatty acid esters (mono-, di-, and triglycerides (col. 18, lin. 30-37, lin. 55-60). The coating includes alkycelluloses, and other common hydrophobic coatings such as cellulose acetate phthalate (col. 12, lin. 57-65). The

Application/Control Number: 10/796,411

Art Unit: 1618

coating can also be micro-porous allowing for small amounts of the drug to be released (col. 16,

Page 4

propylene glycol (col. 19, lin. 27-42). The dosages forms include multi-, or single unit granules

lin. 35-68). The coatings include plasticizers common in the art such as polyethylene glycol and

(col. 12, lin. 39-56). The formulation can be pressed in to min-tablets and filled into capsules

(col. 17, lin. 9-32). These coatings and excipient would all have been obvious to the artisan of

ordinary skill and would have motivated them to use the excipients in order to tailor the release

of the active agent.

11. Regarding the mean serum concentration values, it is the position of the Examiner that these values do not impart patentability barring a showing of an unexpected result. The prior art presents controlled release oral dosage forms that reduce the serum glucose levels in human patients with NIDDM, comprising a dosage of metformin along with a control releasing membrane. The dosage from of Byrd comprises micro-pores that act as passageways for the drug to pass through. The combination of the drug of Whitcomb and the structure of Byrd would result in a formulation that lowered the serum glucose level in a patient with NIDDM. Burden is

result in a formulation that lowered the serum glucose level in a patient with NIDDM. Burden is

shifted to applicant to provide evidence of a patentable distinction in the form of an unexpected

result regarding the mean plasma concentration.

12. With these things in mind it would have been obvious to one of ordinary skill in the art to

combine the coatings and other excipients of the '162 patent with the formulation of the '042 in

order to better control the release of the metformin. It would have been obvious to combine the

teachings with an expected result of an improved controlled release formulation capable of

treating diabetes mellitus and lowering the serum blood glucose levels in a patient in need

thereof.

Application/Control Number: 10/796,411 Page 5

Art Unit: 1618

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Micah-Paul Young whose telephone number is 571-272-0608. The examiner can normally be reached on M-F 7:00-4:30 every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Micah-Paul Young Examiner Art Unit 1618

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